

## 1. INTRODUCTION

In recent years Robusta coffee has become one of Trinidad's more important export crops. The price per pound of raw coffee has risen from 9 cents in 1945 to 68 cents in 1952. The price was even higher in 1953 but has now diminished to about 35 cents.

Under the impact of favourable prices, annual production has increased considerably and the value of exported coffee, both raw and prepared, has risen from \$181,000 in 1945 to \$1,841,000 in 1953. In spite of the drop in the 1954/55 coffee prices, coffee is still, at the moment, a profitable crop.

Except for the depression in the 1930's, the coffee industry in Trinidad has expanded steadily since the early 1920's but up to the present time all increased production has come from the extension of the acreage under coffee. No work has been done on the possible improvement of planting material.

In East Africa and the Netherlands East Indies considerable work has been done on the improvement of the yield and quality of Robusta coffee. The basis of these improvement programmes has been the selection of high yielding mother-trees which have bold, well filled beans.

Unlike Arabica coffee, Robusta is sold on its appearance and not on its liquoring quality. The market demands are for large, well filled beans and a high degree of homogeneity. Broken beans, small beans and diseased beans seriously lower the quality and value of Robusta coffee.

Trinidad coffee is of low market quality and the yield per tree is low. Low quality is caused, in part, by the method of picking and poor agronomic practices. It is probably possible to increase both quality and yield per tree by selecting individual trees in the population in order

to provide the planter with better planting material.

The object of this project was to investigate the improvements that selection would make possible and the methods of selection which could be employed.